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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,753	08/28/2003	Lianjun An	POU920030040US1	1762

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EXAMINER

CHANNAVAJJALA, SRIRAMA T

ART UNIT

PAPER NUMBER

2166

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/652,753

Applicant(s)

AN ET AL.

Examiner

Srirama Channavajjala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8/28/03</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. Claims 1-20 are presented for examination.

#### ***Drawings***

2. The Drawings filed on 8/28/2003 are acceptable for examination purpose.

#### ***Information Disclosure Statement***

3. The information disclosure statement filed on 8/28/2003 is in compliance with the provisions of 37 CFR 1.97, and has been considered and a copy is enclosed with this Office Action.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. ***Claim 20 is rejected under 35 U.S.C. 101 because invention is directed to non-statutory subject matter.***

5. As to claim 20, "a storage medium encoded with a machine-readable computer program code, said code including instructions for causing a computer to implement a method for generating.....method comprising: ..... is directed to computer

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program code interpreted as : "**data signal**" [see specification page 20, line 2] that fails to be a tangibility subject matter. The subject matter of "**signals**" fails to be a process, a machine, a manufacture, or composition of matter, as required for a statutory claim, further "signals" is mere abstract idea and rejected under 35 USC 101, even though applicant disclosed various "computer program code containing instructions on tangible media [specification page 19, 0064], one of the computer program code as a "data signals". Hence, claim 20 is directed to non-statutory subject matter. Applicant hereby required to amend the specification at page 20, 0064, line 2-6 to overcome the rejection.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

***7. Claims 1-17,19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Vincent, III [hereafter Vincent], US Pub.No. 2004/0254922 based on provisional application No. 60/477,530 filed on Jun 11, 2003, and published on Dec 16, 2004.***

8. As to claim 1,19-20, Vincent teaches a system which including a method for generating service state data and extensible meta-data information with a service oriented state data generator' [fig 3, page 7, col 1, 0103], Vincent specifically teaches schema repository are located as a web resources corresponds to service oriented state data generator because it supports web services;

'establishing a platform independent, [page 11, col 1, 0154] extensible meta-data model for said meta-data information' [page 5, col 2, 0083, page 6, col 1, 0087, page 11, col 1, 0153], Vincent specifically suggests various platforms for example windows, Linux, and Java, particularly Java is a platform independent, further Vincent also teaches XML schema framework that supports XML in which individual elements are interrelated; meta-data information corresponds to <head>, <body> elements because,

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head, body elements are integral part of XML schema as detailed in page 6, col 1, 0087;

'obtaining state data schema based on a service state data description' [page 2, col 2, 0037], state data description is defined in the schema, particularly XML document is related to the schema;

'defining an extensible set of meta-data attributes and templates corresponding to said meta data based on requirements of a service' [page 3, col 1, 0039-0040, page 5, 0069, 0072], Vincent specifically teaches schema repository, schema framework and meta data associated with XML schema [see fig 1], also, Vincent teaches XMLbuilding blocks to build complex schema defining various modules corresponds to extensible set of meta-data organized in a template beause these schema objects are reusable code as detailed in page 5, col 1, 0069;

'utilizing said meta-model and based on said state data schema and said attributes, generating service state data based on aid service state data schema' [page 7, col 1, 0104-0105, fig 3], Vincent specifically teaches schema repository and mirrored schema repositories where mirror schema is generated based on the state data schema as detailed in page 7, col 1, 0104-0105;

'said service state data including at least one of state data, state data logical mapping, state data physical mapping, [page 2, 0027-0028] metadata associated with said service state data and meta-data model correlations associated with said meta-data'[page 8, col1, 0112, page 9, col 2, 0133], Vincent particularly teaches both logical mapping and physical mapping of XML schema data as detailed in page 2, 0027-0028,

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further Vincent teaches referencing schema data associated with schema documentation of elements as detailed in page 8-9.

9. As to claim 2, Vincent disclosed 'generating code to enable said service to support a query on said service state data and notification on service state data change' [page 8, col 1, 0115].

10. As to claim 3, Vincent disclosed 'generating code to enable said service to provide access mechanisms on said service state data' [page 8, col 1, 0117].

11. As to claim 4, Vincent disclosed 'creating service state data from any definition schema [page 1, col 2, 0016]; where said data definition schema include at least one of XML schema, DTD, RELAX NG custom schema definition languages, derivatives of said schema' [page 1, col 1, 0003, page 2, col 1, 0019], Vincent specifically teaches W3C XML schema 1.0, further suggests other types of schemas for example RELAX NG schema.

12. As to claim 5, Vincent disclosed 'meta-data modeling provides flexibility in generating said service state data by providing versioning, compatibility, and a flexible design process and a standard code generation [page 2, col 1, 0021, page 3, col 1, 0040]; 'wherein said meta-data modeling is indicative of schema or meta-data for said service state meta-data' [page 3, col 1, 0039].

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13. As to claim 6, Vincent disclosed 'meta-data model is supported with a drag and drop window system wherein a service developer can annotate said state data schema by drag and drop meta-data information'[page 8, col 2, 0118-0119, fig 4], Vincent specifically teaches user interface to view schema, further user interface supports various operations for example "copy", therefore, drag and drop operations are integral part of user interface because user can select various operations based on the requirements, further Vincent also teaches "pop-up window" and menu [page 13, col 2, 0180].

14. As to claim 7, Vincent disclosed 'meta-data models employ a common language including XML or derivative thereof for describing said meta-data that is extensible or support additional meta-data features' [page 2, col 2, 0032].

15. As to claim 8, Vincent disclosed 'user to define a mapping between meta-data and service state data [page 2, 0027-0028], said data mapping including at least one of a logical abstraction of said service state data where this abstraction holds references to real service instance data, and a direct mapping can be a direct mapping to service state data' [page 4, col 1, 0056], Vincent specifically teaches schema root elements also defines complextypes , these root elements are logically connected and mapping to various complex types for example within schema filename and name of the schema's parent directory or grandparent directory.



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16. As to claim 9, Vincent disclosed ' meta-data attributes and templates facilitate mapping meta-data to said service state data, wherein said attributes are meta-data information on at least one of service state constraints, service state qualifiers, service state data access mechanisms' [page 10, col 1, 0140].

17. As to claim 10, Vincent disclosed 'defining meta-data attributes includes extensible service state data qualifiers' [page 10, 0138]; 'defining notification qualifiers on said service state data to indicate where a change in said service state data promulgates notification' [page 9, col 1, 0129]; 'defining security requirements on said service state data discovery and notification' [page 9, 0130,page 10, col 1, 0143]; 'defining transaction qualifiers of said service state data' [[page 9, 0134].

18. As to claim 11, Vincent disclosed 'defining meta-data attributes includes defining extensible service state data constraints and defining one or more relationships among said service state data [page 4, col 1, 0056, page 10, 0138] wherein said extensible service state data constraints include at least one of constraints on mutability of said service sate data; constraints on validity of said service sate data including life time constraints and constraints cardinality of said service state data [page 2, col 2, 0032].

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19. As to claim 12, Vincent disclosed 'defining meta-data attributes includes defining extensible service state data access mechanisms, wherein said extensible service state data access mechanisms include: a flexible callback mechanism on said service state data and expression through said meta-data [page 2, 0034, page 3, col 1, 0039]; a data push mechanism for service state data update and expression through said metadata' [page 3, col 2, 0049]; 'other extensible data access mechanisms on said service state data including direct access to said service state data held in a database or direct access to state data through SNMP, CIM, Web services [page 7, col 1, 0106, page 10, col 1, 0137], extensible custom template mechanisms for data access based on requirements of a service [page 12, col 1, 0163].

20. As to claim 13, Vincent disclosed 'pluggable extension mechanisms for meta-data attributes' [page 12, col 1, 0170].

21. As to claim 14, Vincent disclosed 'obtaining service developer feedback on meta-data generation for said service state data based on said meta-data attributes [page 4, col 1, 0052].

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22. As to claim 15, Vincent disclosed 'service developer feedback is provided through custom dialog boxes wherein said service developer can pass parameters to said service oriented state data generator [page 9, col 1, 0128] and wherein said service developer can provide templates to guide said generating and said mapping [page 10, col 1, 0140].

23. As to claim 16, Vincent disclosed 'developer creating a relationship between selected service state data' [page 10, col 2, 0146].

24. As to claim 17, Vincent disclosed 'validating software code based on said generating to ensure that said code is compatible with said meta-data model and said state data schema' [page 10, col 1, 0144].

***Claim Rejections - 35 USC § 103***

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. ***Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vincent, III [hereafter Vincent], US Pub.No. 2004/0254922 based on provisional application No. 60/477,530 filed on Jun 11, 2003, and published on Dec 16, 2004 .***

27. As to claim 18, Vincent disclosed generator is configured as a pluggable framework to facilitate use or included with other user interfaces frameworks' [page 1, col 2, 0016], further it is noted that Vincent supports various platforms that including Java, Windows, Linux [page 11, col 1, 0154], however, it is noted that Vincent does not specifically teach 'eclipse plug'. It would have been obvious to one of the ordinary skill in the art at the time of applicant's invention to use various plug-ins that including specific plug in "eclipse" because typical plug-in provides software services for controlling a set of tools working together to support programming tasks, further ordinary skill in the art would have created required plug-in resources or files that allows to copy resource files, and establish relationships declared in the XML elements.

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**Conclusion**

**The prior art made of record**

**a.** US Pub.No. 2004/0254922

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is 571-272-4108. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam, Hosain, T, can be reached on (571) 272-3978. The fax phone numbers for the organization where the application or proceeding is assigned is 571-273-8300 Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

SC  
Patent Examiner.  
March 4, 2006

  
SRIRAMA CHANNAVAJJALA  
PRIMARY EXAMINER